

# CAD-ToolBox 1. 8 – Manual for the pCon.planner Plugin

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# 1 Introduction

The CAD ToolBox enables the modification of CAD data directly in pCon.planner 8: After integrating the plugin into pCon.planner, no additional CAD program is needed in order to prepare pcr\_geolib files (OFML component libraries) for the use in pCon.creator.

## 2 Technical Information


At least pCon.planner 8.8 PRO is needed to run the plugin.

For pCon.planner 8 system requirements, please read  
[https://docs.pcon-solutions.com/pCon/planner/latest/pCon.planner\\_System\\_Requirements\\_en.pdf](https://docs.pcon-solutions.com/pCon/planner/latest/pCon.planner_System_Requirements_en.pdf)

## 3 Installation and Licensing

To install the plugin, proceed as follows:














1. Download the ZIP package of the plugin provided by EasternGraphics GmbH.
2. Unzip the package.
3. Start the setup file contained in the CAD ToolBox package. You need administrator rights to install the plugin.
4. On the next start of pCon.planner 8 PRO, you will find the CAD ToolBox included in the ribbon and ready for use.






To use the plugin, you need a separate license that is retrieved via pCon.login. To run the plugin, you have to log onto pCon.login via the login button (  ) in the upper right corner of pCon.planner.

The license can be ordered via [egr-orders@easterngraphics.com](mailto:egr-orders@easterngraphics.com). The license has to be assigned to your pCon.login organization and to the group of users of the CAD ToolBox within the organization.

More information on pCon.login: <https://login.pcon-solutions.com/en/help>

## 4 Feature Overview

Icon	Feature	Background
<b>CAD</b>		
	<i>Mode</i>	Switch between pCon.planner behavior and CAD behavior.
	<i>Debug Rendering</i>	Click button to enable debugging of rendering. Only available in <i>Concept</i> render mode.
<b>General</b>		
	<i>Settings</i>	Open dialog with settings for CAD Mode, layer structure and matrix.
	<i>Quick Select</i>	Open dialog to filter blocks or layers and mark objects in the drawing.
	<i>Rename Objects</i>	Open dialog to rename blocks and layers according to CAD Conventions.
	<i>Check Drawing</i>	Open dialog to check blocks or layers in the drawing for errors and fix these errors.
	<i>Insert Point</i>	Insert help point in the drawing.
	<i>Insert Matrix</i>	Insert standard matrix for ODB in current drawing.
<b>Blocks</b>		
	<i>Create 2D Symbol</i>	Create 2D blocks for the selected objects.
	<i>Create Block from Selection</i>	Generate a block from all selected objects.
	<i>Redefine Base Point</i>	Set new base point for selected block.
	<i>Export Blocks</i>	Export every block in the selection into a single DWG file.
	<i>Insert Block</i>	Insert block (as selected from the drop-down menu) as a new block.

	<i>Ungroup nested Blocks</i>	Ungroup nested blocks in selection.
<b>Layers</b>		
	<i>CAD Layer Manager</i>	Open dialog to set layer colors, import or export layers and add or delete layers.
<b>Visibility Control</b>		
	<i>Hide/Unhide</i>	Hide current selection/Hide other objects/Unhide everything.
	<i>Scale</i>	Use pCon.planner <i>Scale</i> tool.
	<i>Ungroup</i>	Use pCon.planner <i>Ungroup</i> tool.

## 4.1 Context Menu

Open the context menu with a click on the right mouse button to get access to additional options for your selected objects.

<i>Convert to Mesh</i>	<p>Converts solids to meshes, can be used for blocks as well as for solids within blocks – blocks do not have to be opened for conversion.</p> <p><b>Please note:</b> blocks lose their assigned color when using this command. The color assignment can be restored by <i>Check Drawing</i>.</p> <p>Multi selection is possible.</p>
<i>Show content of blocks</i>	Opens a dialog listing the objects contained in the selected block.
<i>Reset scale</i>	<p>Reset scale parameters of selected object in the <i>Properties Editor</i>, <i>CAD Toolbox</i> tab, to 1.</p> <p><i>Reset scale</i> is only recommended for original blocks, not for rotated or scaled references.</p> <p><b>Please note:</b> blocks lose their assigned color when using this command. The color assignment can be restored by <i>Check Drawing</i>.</p>
<i>Reset angle</i>	<p>Resets rotation values in <i>Properties Editor</i> while keeping rotation in drawing for selected blocks.</p> <p>Note: works only if the selected block does not have references.</p>

## 5 How to use the CAD ToolBox: General Remarks

### 5.1 Properties Editor

The pCon.planner *Properties Editor* is of central importance for your work with the CAD ToolBox. Select objects in your plan and open the *Properties Editor*.

**If the CAD ToolBox plugin is activated, the *Properties Editor* contains a separate *CAD ToolBox* tab.**

Here you can:

- Read and copy the *Block Name*.
- See types of the selected objects. Multiselecting objects are displayed sorted and grouped by type.

Note: the *Show all Properties* setting in the hamburger menu of the *Properties Editor* has to be activated for the CAD ToolBox tab to be displayed.

- Set *Layer* for selected object.
- Set *Scale* for selected blocks, using a scale factor for X, Y and Z dimensions.

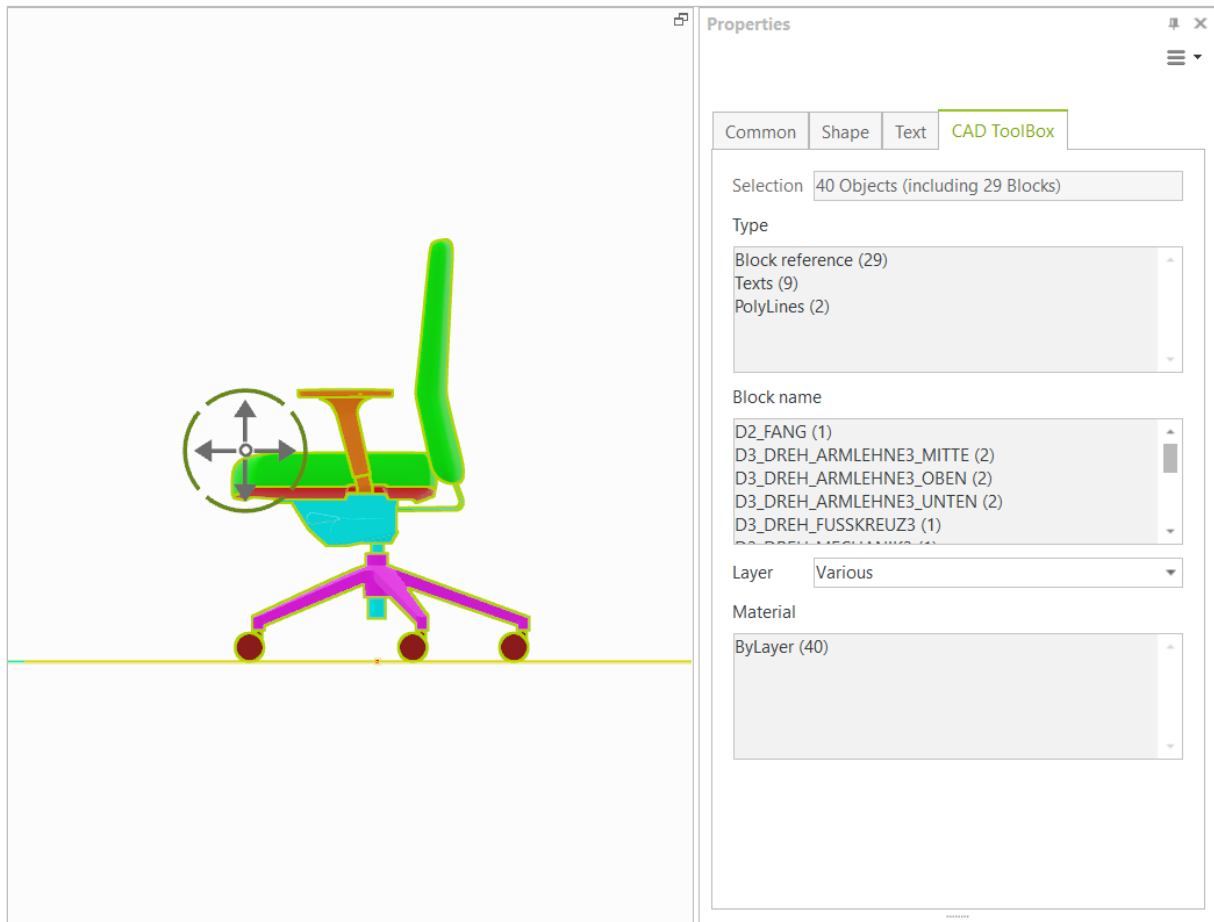
In case of multi selection, the number of selected blocks is displayed in the *Block name* field of the *Properties Editor*. When the cursor is moved over the *Block name* field, the names of the selected blocks are displayed.

**The *Common* tab of the *Properties Editor* is also important for your work with the CAD ToolBox.**

Here you can:

- Edit *Position*, *Scale* and *Rotation* of the selected block. The number of decimal places to be entered in the *Properties Editor* depends on the *Precision* set under *Settings, Edit* tab.

**If a 2D or 3D *Drawing Element* inserted into your drawing via the *Start* tab, *Drawing Elements* group of pCon.planner is selected, the *Shape* tab is opened in the *Properties Editor*.**



## 5.2 pCon.planner Tools

In addition to the *Properties Editor*, the following pCon.planner tools are useful when working on your CAD data:

- *Layers* (pCon.planner Toolbar): Use layers dialog of pCon.planner with advanced layer filter.
- *Purge* (File menu): Delete blocks and layers that are no longer in use.
- *Drawing Elements* (Start tab): Use *Cuboid*, *Sphere* etc. to draw new blocks.
- *Text* (Start tab): Add information to the matrix.
- *Tools* (Edit tab): Use *Array*, *Subtract*, *Merge* etc. to edit drawing elements.

### 5.3 Using Base Points

Every block has a base point that is highlighted in green if the block is selected. You can then left-click the base point to move the block.



## 6 Features : CAD Group

### 6.1 CAD Mode and pCon.planner Mode

The CAD ToolBox is able to switch between two working modes. These are the differences:

pCon.planner Mode	CAD Mode
When used for creation of 3D Objects:	
<ul style="list-style-type: none"> <li>3D drawing elements (cuboid, sphere, cylinder and cone) are <b>directly created as blocks</b></li> </ul>	<ul style="list-style-type: none"> <li>3D drawing elements (cuboid, sphere, cylinder and cone) are created as primitives</li> <li><i>Create Block</i> command needed to turn drawing element into block</li> </ul>
Working with block references	
<ul style="list-style-type: none"> <li>Copies are not automatically created as references.</li> <li>Reference copies are created by means of the <i>Reference</i> tool, <i>Edit</i> tab.</li> <li>Block name receives new internal ID if an object is opened for editing (double click to open group)</li> <li>Editing an opened object will lead to changes on this object only, not to changes on its regular copies (copies that are not explicitly created as references).</li> </ul>	<ul style="list-style-type: none"> <li>All copies that are created are automatically treated as references and take the same name (block sharing).</li> <li>Block name remains unchanged if an object is opened for editing (double click to open group)</li> <li>If a group is opened for editing, the selected component within the group as well as its references will be edited</li> </ul>

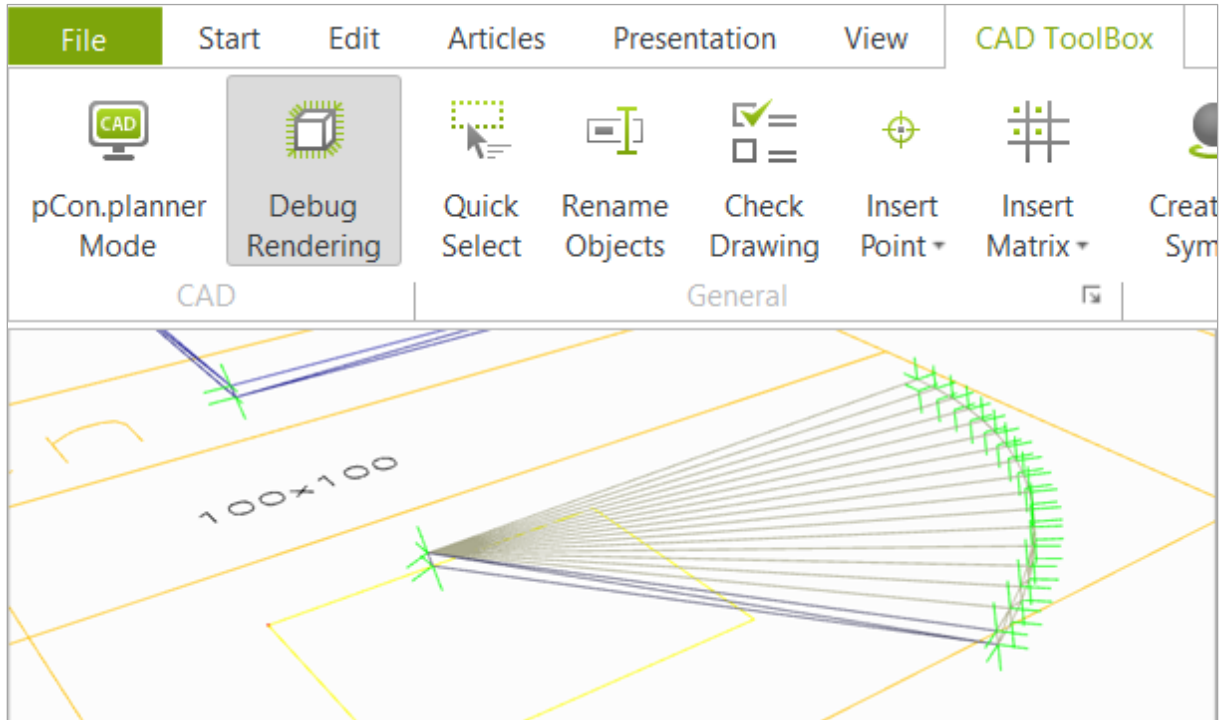
When CAD Mode is active, 'CAD' will be displayed at the top of each viewport, independent of the pCon.planner register you are working with. To make visible if CAD Mode is active, you can also create a *Render Style* named 'CAD' and check the box *Use Render Style named CAD when in CAD Mode* ([see chapter on Settings](#)).

pCon.planner by default starts in *pCon.planner Mode*. If working with pCon.creator, pCon.planner will open in *CAD Mode* when started with parameter *-CADsilent*.



## 6.2 Debug Rendering

When *Debug Rendering* is activated, the display of the objects in the drawing changes to include the vertex normals.



In addition, information on errors in the rendering of objects can be retrieved from the [Check Drawing](#) dialog. It will state the following rendering errors that are also visible in *Debug Rendering* mode:

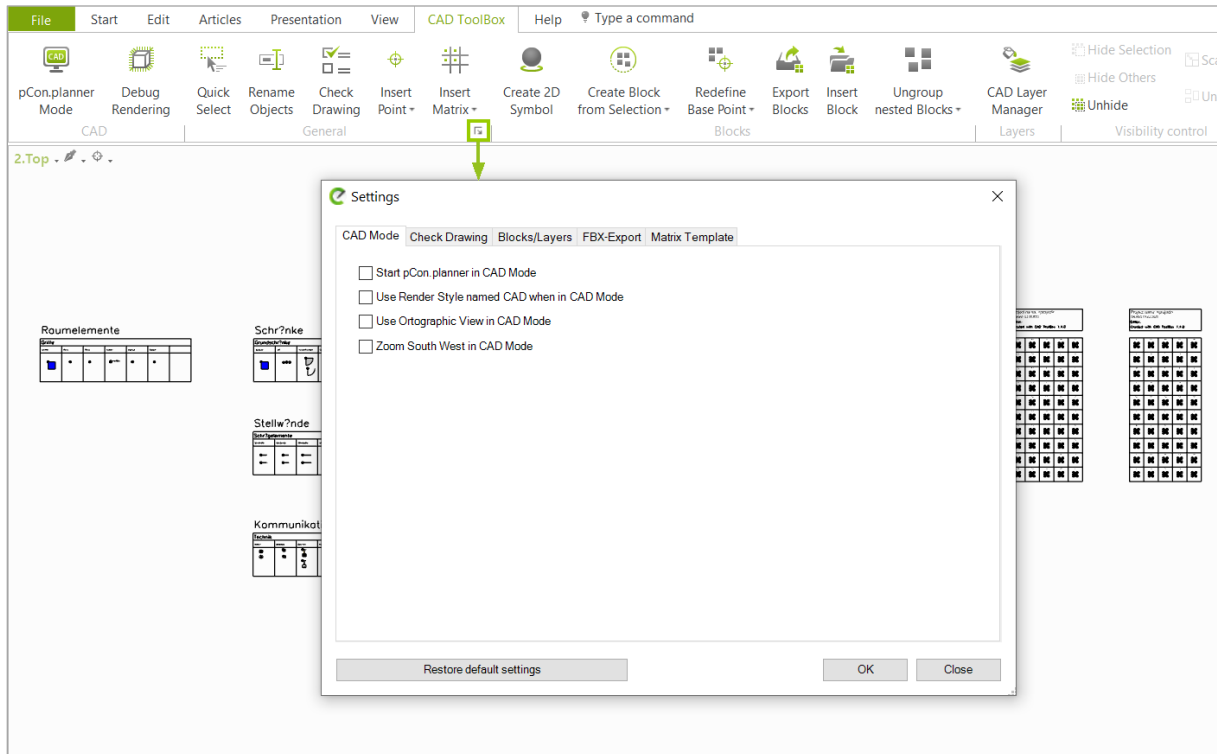
- Vertex normals with a deviation of more than 90 degrees from a corresponding face normal.
- Vertex normals with length of zero.
- Vertex normals that are not unit vectors.

In order to display the vertex normals, *Perspective* projection has to be used.

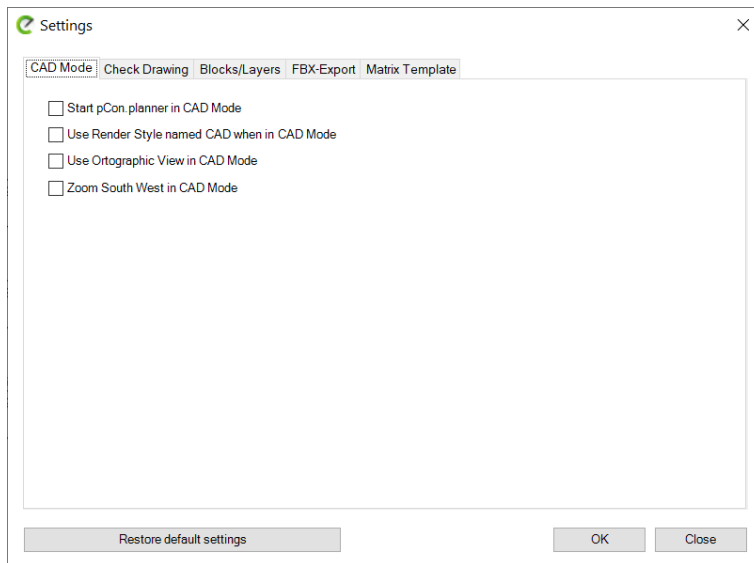
## 7 Features: General Group

### 7.1 Settings

Clicking the small arrow, *General* group, (see image) opens a dialog containing the enhanced settings for *CAD Mode*, for the new *Check Drawing* features ([more information](#)) and for the matrix.



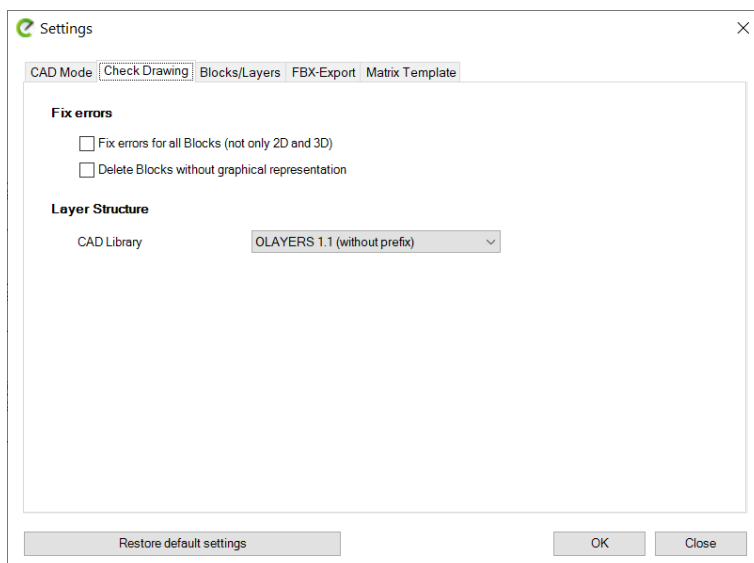
### Tab: CAD Mode



**Start pCon.planner in CAD Mode:** If this option is activated, pCon.planner will start directly in *CAD Mode*. Please note that this might cause unwanted behavior while working with the regular pCon.planner features ([more information](#)).

**Use Render Style named CAD when in CAD Mode:** Use the *Render Styles Dialog* (View tab of pCon.planner) to create a distinct *Render Style* called *CAD*. Then check this setting to automatically use the *CAD Render Style* when in *CAD Mode*.

### Tab: Check Drawing



**Delete Blocks without graphical representation:** If this option is activated, blocks without graphic representation are deleted when errors are fixed via the *Check Drawing* dialog ([see corresponding chapter](#)).

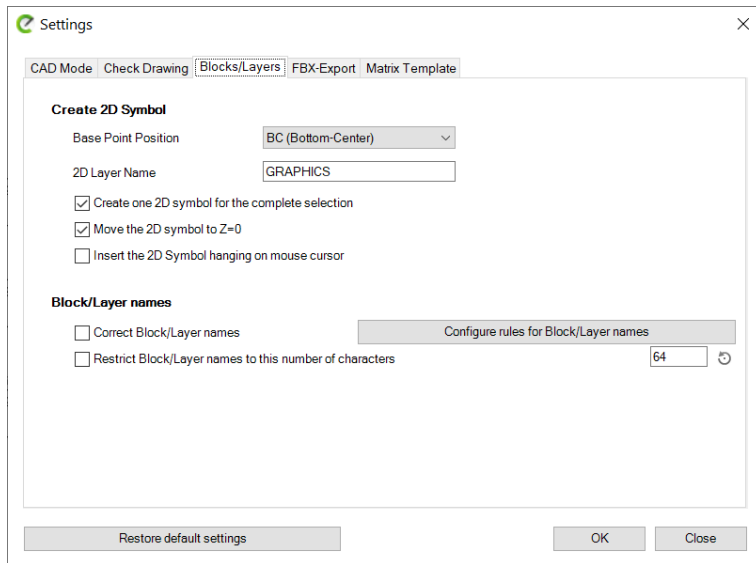
#### **Fix errors for all blocks (not only 2D and 3D):**

When activated, this checkbox includes blocks without D2 or 3D prefix into the checking routine.

#### **Layer Structure**

If *OLAYERS 1.1* is used as *CAD library*, *3D\_* is set as a default prefix for your object names. If you select *Neutral* here, you need to define a prefix for your block names manually.

## Tab: Blocks/Layers

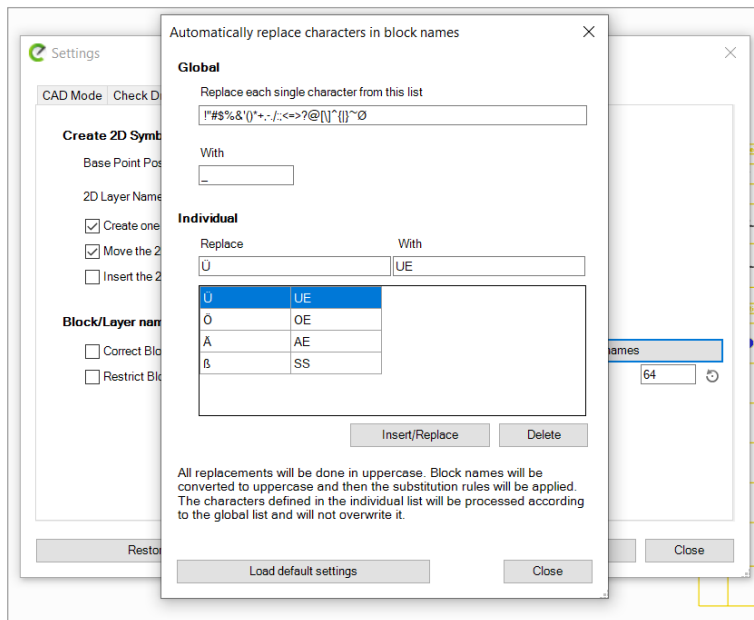


### Create 2D symbol

Settings for 2D symbols that are created for selected objects by clicking Create 2D Symbol, Blocks group.

### Block Names

Here you can activate the *Correct Block Names* feature (see next row of this table) and activate the shortening of block names.

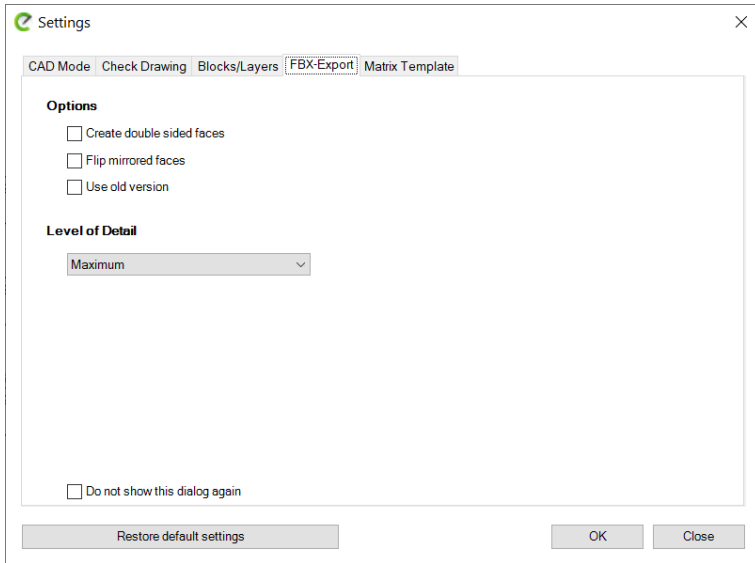


### Configure rules for block names

By clicking *Configure rules for block names*, you open a separate dialog. Here you define parameters for the replacement of characters from block names (for this feature, see chapter on [Quick Select dialog](#)).

It is possible to define either a common character for a number of defined characters or to replace an individual character, like for example an umlaut, with an individually chosen new character.

### Tab FBX Export

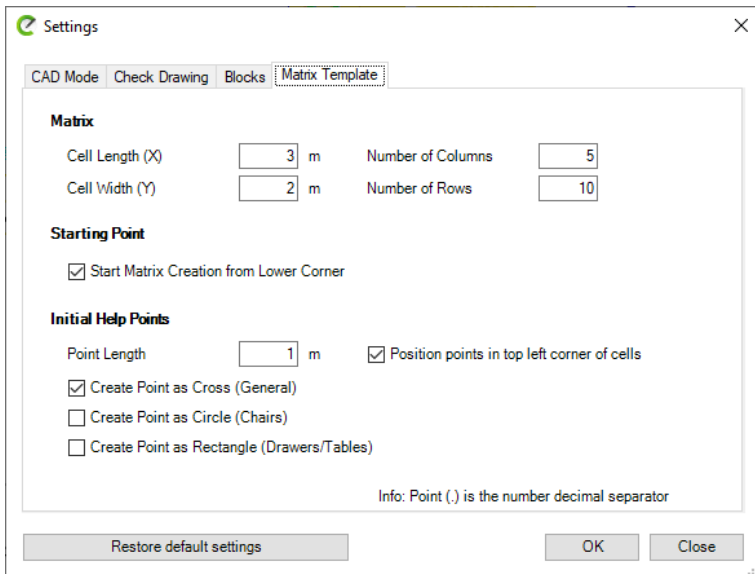


Contains settings for the FBX export.

This tab is also opened when the option *Convert to Mesh* (context menu for selected objects) is used.

The *Level of Detail* determines the display quality for the solids converted into meshes as well as for blocks exported to the FBX format (see [Export Blocks](#)).

### Tab: Matrix Template



**Initial Help Points:** Create help points of different shapes to facilitate the creation of your desired objects.

## 7.2 Quick Select

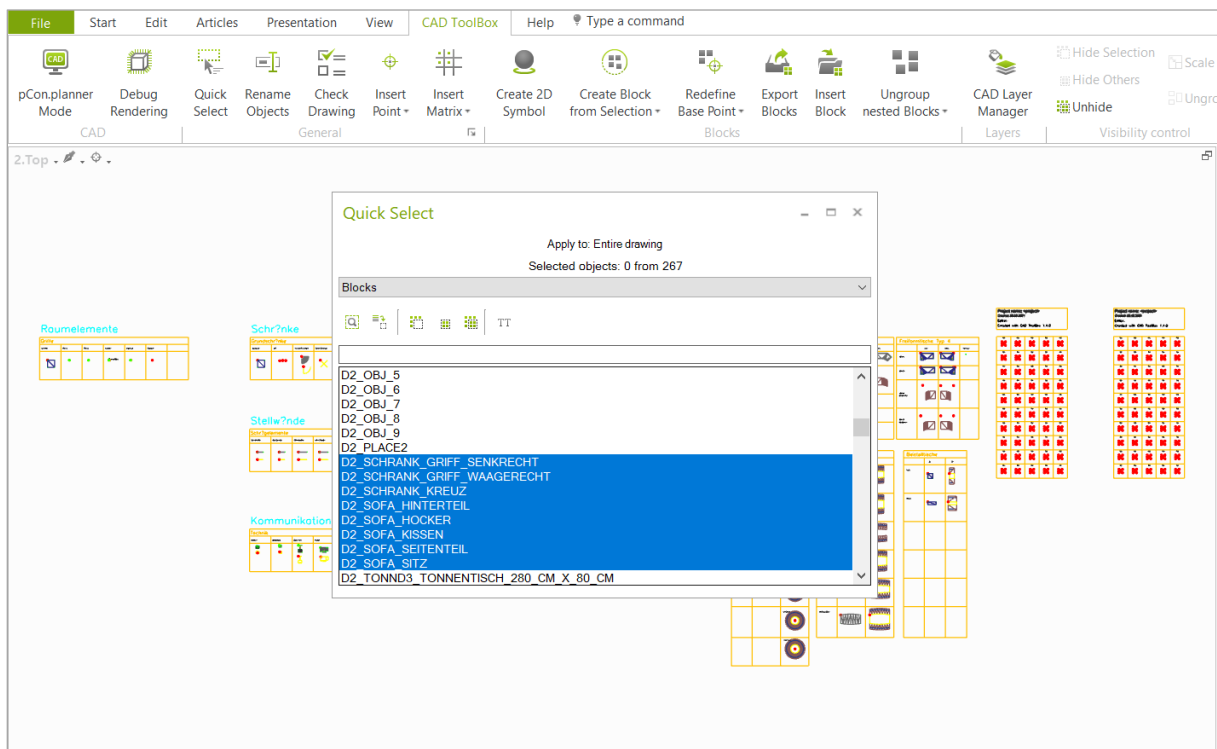
The *Quick Select* button opens a dialog for filtering and selecting objects or their layers. The dialog can be used for all types of objects included in your drawing.

This is how you use the dialog:






- Use the drop down menu at the upper end of the dialog to set display to the desired type of object in the list below.
- Select one or multiple layer or object names from the list.

If you want more information on an object listed in the filter results, double click it in the list. Type, layer etc. will be displayed in the *CAD ToolBox* tab of the *Properties Editor*.

Note: In order to select all objects that are listed in the dialog according to your filter setting at once, press SHIFT and select the filter results from bottom to top. As an alternative, click the mouse wheel or middle mouse button over the filter results. Now, all objects are selected and can be marked in the drawing, hidden etc.



You can choose between the following options integrated in the dialog:

Icon	Feature	Background
	<i>Zoom to Selection</i>	Select blocks or objects on layers marked in the dialog in the drawing and zoom in on them
	<i>Mark Selection in Plan</i>	Select all blocks/objects on layers in the drawing
	<i>Hide Selection</i>	Hide blocks/layers selected in the dialog in the drawing
	<i>Hide Others</i>	Hide blocks/layers not selected in the dialog in the drawing
	<i>Unhide</i>	Show all objects in the drawing
TT	<i>Upper Case</i>	Select blocks in the dialog and correct their names according to the parameters defined via the <a href="#">Settings</a>  Parameters for block names can be defined via the Settings, Blocks tabs  Option only available for blocks

### Select by Color

Select an object or block within the drawing. Open the context menu by right click in your drawing. Click *Select by Color* to mark all the objects or blocks in the drawing that use the same color.

*Select by Color* will help you prepare the creation of blocks out of a multitude of single drawing elements that are difficult to select.

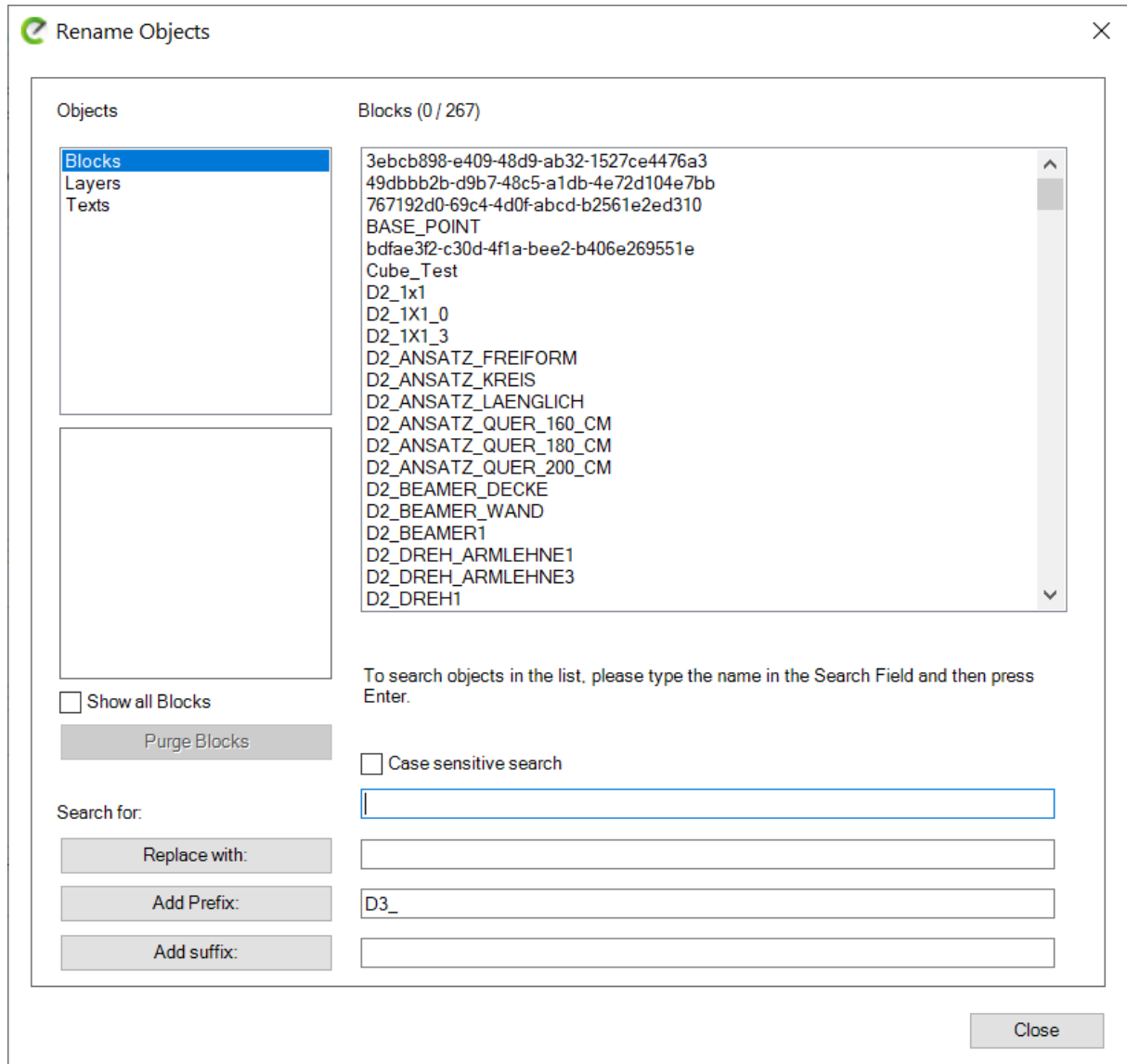
### Select References

Select an object. Then, right-click to open the context menu and click *Select References* to highlight all objects in the drawing that are references of the current selection.

## 7.3 Rename Objects

The *Rename Objects* button opens a dialog were you can select and rename blocks, layers or texts by search&replace.

If you select objects within your drawing before opening the *Rename Objects* dialog, only the layers/blocks of the selected objects will be displayed in the dialog. Close the dialog and deselect all objects in the plan to get a complete list of all layers and blocks in the drawing.



If you want to rename blocks, the *Show all Blocks* checkmark serves to display all blocks in your drawing in the list – even blocks without graphic representation. Use *Purge Blocks* to delete these blocks without graphic representation.

You can delete prefixes by entering them under *Search for*, leaving the *Replace with* field empty and confirming with the *Replace with* button. The *Add prefix* button adds the entered prefix to the selected designations. The *Add suffix* button adds the suffix entered here to the selected blocks, layers or textnames.

Text items are listed together with their internal IDs. These IDs cannot be searched for or replaced. Please enter only the text itself in the *Search for:* and *Replace with:* fields.



## 7.4 Check Drawing









A click on this button opens a dialog containing different options for error analysis and patching. The dialog will detect and list errors on base of *Layers* or *Blocks*. Errors automatically fixed by checking the drawing include:

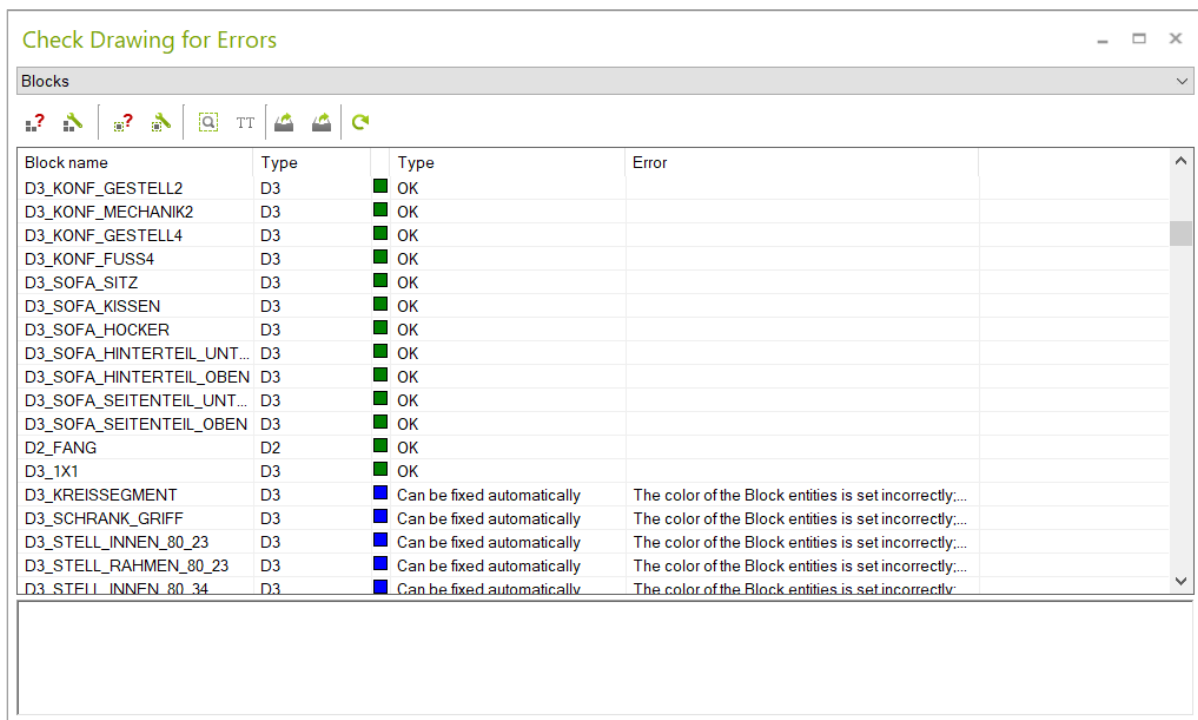
- Wrong layer assignment
- Deletes obsolete blocks, for example blocks that do not contain objects or blocks without graphical representation (to delete blocks without graphic representation, activate corresponding option in the Settings - [see chapter Settings](#))
- Blocks with wrongly assigned color (color not set by layer)

Furthermore, the dialog will list errors that have to be fixed manually, like for example:

- Blocks that violate block name convention
- Nested blocks
- Objects with corrupted 3D display (blocks with wrong vertex normal – these are also made visible by the [Debug Rendering feature](#))
- Blocks that are not treated as 2D or 3D blocks (not using the D2 or D3 suffix specified in the [Settings – Check Drawing tab](#)) and can therefore not be imported in pCon.creator (blocks have to be renamed – see chapter [Rename Objects](#))
- Rotated blocks – a deviating rotation of blocks will not be taken into consideration for the pCon.creator import
- Base point is set at a distance of more than three meters from the bounding box of a block
- If objects inside 2D block are set to different layers, option to fix this is offered

These are the features in the dialog:

Icon	Feature	Background
	<i>Check all Objects for Errors</i>	Detect errors in all blocks or layers in the plan.
	<i>Fix Errors for all Objects</i>	Repair errors for all blocks or layers in the plan.
	<i>Check Selected Objects for Errors</i>	Detect errors in all selected blocks or layers. Selection is possible in list as well as in the drawing.
	<i>Fix Errors for Selected Objects</i>	Repair errors for all selected blocks or layers.
	<i>Zoom to Selected Objects</i>	Select blocks or objects on layers marked in the dialog in the drawing and zoom in on them.
	<i>Export all to CVS</i>	Export the current content of the dialog as CSV file
	<i>Export selection to CVS</i>	Export the objects currently selected in the dialog as CSV file
	<i>Refresh</i>	Refreshes content of dialog after fixing errors



Block name	Type	Type	Error
D3_KONF_GESTELL2	D3	OK	
D3_KONF_MECHANIK2	D3	OK	
D3_KONF_GESTELL4	D3	OK	
D3_KONF_FUSS4	D3	OK	
D3_SOFA_SITZ	D3	OK	
D3_SOFA_KISSEN	D3	OK	
D3_SOFA_HOCKER	D3	OK	
D3_SOFA_HINTERTEIL_UNT...	D3	OK	
D3_SOFA_HINTERTEIL_OBEN	D3	OK	
D3_SOFA_SEITENTEIL_UNT...	D3	OK	
D3_SOFA_SEITENTEIL_OBEN	D3	OK	
D2_FANG	D2	OK	
D3_1X1	D3	OK	
D3_KREISSEGMENT	D3	Can be fixed automatically	The color of the Block entities is set incorrectly...
D3_SCHRANK_GRIFF	D3	Can be fixed automatically	The color of the Block entities is set incorrectly...
D3_STELL_INNEN_80_23	D3	Can be fixed automatically	The color of the Block entities is set incorrectly...
D3_STELL_RAHMEN_80_23	D3	Can be fixed automatically	The color of the Block entities is set incorrectly...
D3_STELL_INNEN_80_34	D3	Can be fixed automatically	The color of the Block entities is set incorrectly...

The tab *Check Drawing* in the *Settings* dialog ([see chapter on Settings](#)) defines the OLayer settings for the current drawing.

In the *Check Drawing* dialog, blocks and layer types are automatically detected based on the OLayer specified in the *Settings* dialog. If the blocks or layers are not set correctly, please check the *Settings* dialog.

The objects will be tested according to their type (see second column in *Check Drawing* dialog). A new layer or block type can be set:

1. In the *Check Drawing* dialog, select the blocks or layers that you want to assign to another type.
2. Right click on the name of the selected objects.
3. Select a new block/layer type from the context menu.

The object type is reset whenever the *Check Drawing* dialog is closed and reopened.

## 7.5 Insert Point

Here you can insert help points for drawing purposes into your drawing. There are the following options:

- **Insert One Point:** click once to a desired place in the drawing (or enter the position in numbers) to insert a single help point.
- **Insert Multiple Points:** every click inserts a new help point. Press **ESC** to end the command.
- **Insert Points to Object Base Points:** automatically insert help points on base points of selected objects.

## 7.6 Insert Matrix

This command inserts the standard planning grid into your current drawing to help you locating and describing objects.

When clicking *Insert Matrix*, first the *Settings* dialog will open. On the *Matrix Template* tab, the starting point can be set for the matrix creation.

The help point type can as well be set in this dialog: Circular, rectangular and cross-shaped points can be used, depending on purpose.

All parts of this matrix are located on layer `_Documentation` and can therefore easily be hidden. For the new drawing, the layer `_HelpPoint` is automatically created. All help points will be assigned to layer `_HelpPoint`.

### Option: Fix Matrix Points

This feature is used to repair help points in your matrix. It is needed when points are not displayed correctly.

1. In a planning where you already inserted a matrix, open the drop-down menu by clicking the downward pointing arrow next to *Insert Matrix*.
2. Select the Option *Fix Matrix Points*.
3. The CAD-ToolBox will open a dialog stating all points that need to be fixed.
4. For the points to be repaired, confirm by clicking *Yes*.

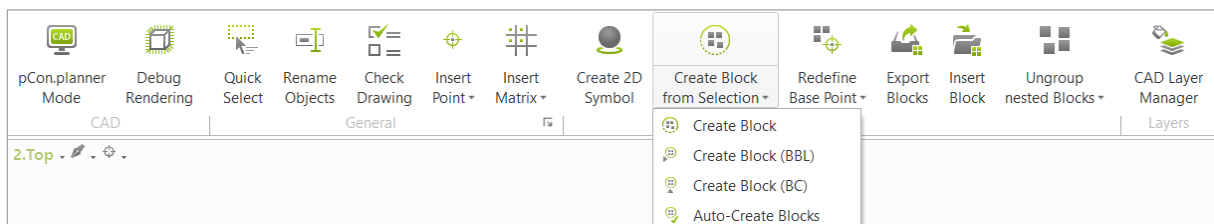
## 8 Features: Blocks Group

### 8.1 Create 2D Symbol

Creates 2D blocks for the selected objects. This feature is different from the default pCon.planner feature (*Edit* tab). The 2D symbols created directly from the *CAD ToolBox* tab can be processed in pCon.creator. By default, one common 2D symbol will be created for the selection if multiple objects are selected. To create an individual 2D symbol for each object, please uncheck *Create on 2D symbol for the complete selection* in the *Settings (Blocks* tab).

When working on geolibs or preparing blocks for use in pCon.creator, please do only use the *Create 2D Symbol* feature directly on the *CAD ToolBox* tab.

### 8.2 Create Block



This feature is used to create a block from selected blocks or other geometries already contained in the drawing. There are four options in the dropdown menu (see image):

1. **Create Block:** When using this option, a mandatory final click on the new block will set the base point.
2. **Create Block (BBL):** Base point for new block is automatically set to lower back left corner of the selections bounding box (Bottom Back Left).
3. **Create Block (BC):** Base point for new block is automatically set to lower center of the selections bounding box (Bottom Center).
4. **Auto-Crete Block:** Creates block from objects according to specific properties. See following chapter.

### 8.3 Auto-Crete Blocks

Select objects to create blocks out of them or to combine them into blocks according to defined criteria. Clicking *Auto-Crete Blocks* will open a dialog with additional settings, including the following:

**Block name:**

Set name for the block to be created. Prefixes are taken from the respective entries made in the settings ([more information](#)).

**Note:** If a block is created including a text, the text will automatically be set as the block name within the dialog and can be altered manually.

### Group by:

Colors, Layers, Materials or Objects. Defines criterion by which objects are bundled. Colors: One block per color (same for layers and materials), objects: one block per single object.

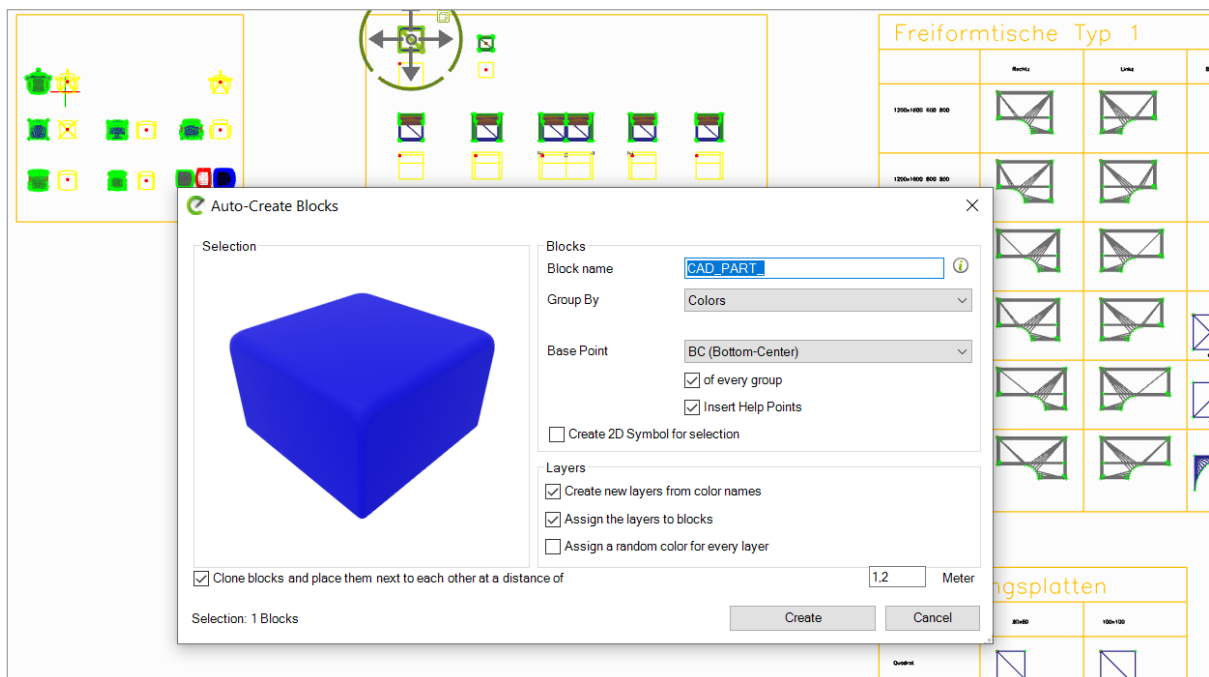
### Ebenen

The preset mechanism for the creation of new layers depends on the criterion set under *Group by*. The option *Assign the layers to blocks* is used to auto-assign the newly created layers to the generated blocks.

Das voreingestellte Verfahren für die Erstellung neuer Ebenen hängt von dem unter *Gruppieren nach* eingestellten Kriterium ab. Die Option *Ebenen den Blöcken zuweisen* dient dazu, die neu erstellten Ebenen automatisch den erzeugten Blöcken zuzuordnen.

### Clone blocks and place them next to each other at a distance of [number] meters:

Creates copy of each block within the selection and distributes blocks according to distance entered for this checkmark. This feature is used to distribute the parts of a model within a row of the matrix ([more information](#)).



## 8.4 Redefine Base Point

Used to relocate the base point for a selected block.

The base point can only be redefined one object a time: Please do select a single block before executing one of the three options below.

*Redefine Base Point* can only be executed for the original object: set base point for object that is not rotated, scaled or mirrored.

1. **Redefine Base Point:** When using this option, a single click on the desired position will relocate the base point.
2. **Redefine Base Point (C):** Base point is moved to center of the selections bounding box (Center).
3. **Redefine Base Point (BBL):** Base point is moved to lower back left corner of the selections bounding box (Bottom Back Left).
4. **Redefine Base Point (BC):** Base point is moved to lower center of the selections bounding box (Bottom Center).

Please do only use the Redefine Base Point options directly from the CAD-Toolbox tab. The pCon.planner *Origin* tool is not compatible to the data creation process.

## 8.5 Export Blocks

Select blocks in the drawing to export them into single files, one file per block. Clicking *Export Blocks* opens a dialog where you specify:

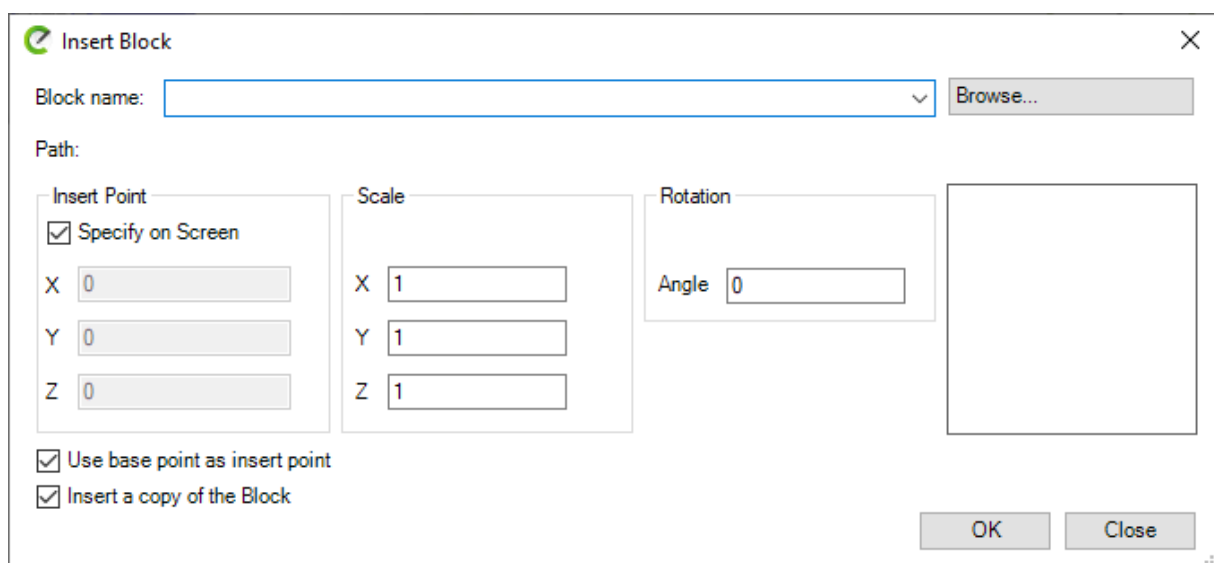
- The path and folder under which the files are saved
- The file format: *DWG* or *FBX*

If *FBX* is selected as export format, additional settings for the quality of the exported blocks are:

- *Create double-sided faces:* prevents incorrect rendering of the blocks when opened in other applications
- *Flip mirrored faces:* facilitates correct display of mirrored objects; enhances file size
- *Use old version:* use FBX version 6 instead of version 7
- *Level of detail:* regulates quality of tessellation

After the export you will receive a message stating how many blocks have been successfully exported and which blocks do still contain errors.

## 8.6 Insert Block



Open the *Insert Block* dialog. Click *Browse...* and select one or multiple blocks from your local file system. The *Insert Block* dialog allows you to define scale and angle for the blocks to be inserted.

To replace a block in the drawing with a newly inserted block, the name of the inserted DWG file has to match with the name of the block you want to replace. Using *Insert Block* automatically replaces all references of the replaced block.

Check the option *Specify on Screen* in order to define the position of the block by a mouse click at the desired position in the drawing.

Check the option *Use base point as insert point* to set the insertion point to the base point for the new block.

Activate the option *Insert a copy of the block* to insert a copy of the original block. Upon inserting, the copy is renamed by adding the suffix *Copy*.

Note: Blocks without graphics can also be inserted, as they can be selected by the block name alone.

## 8.7 Ungroup Blocks

Select the version of the ungroup blocks command you want to use from the drop-down menu:

- *Ungroup nested Blocks*: ungroups all nested blocks in current selection but keep the blocks on the last level intact.
- *Ungroup all nested Blocks*: ungroups all blocks as well as all nested blocks in your current selection. As result, you will receive single objects without any hierarchic relations.

Please note: The CAD ToolBox provides two different *Ungroup* features:









- *Ungroup* is the default pCon.planner tool. It splits nested groups into single groups. This command has to be executed multiple times to disassemble a hierarchical object into individual parts.
- *Ungroup Blocks* can disassemble hierarchical objects completely – in just one step.

## 9 Features: Layers Group

### 9.1 CAD Layer Manager

The *CAD Layer Manager* button opens a dialog that lists all of the existing layers in the active drawing and enables you to set a new color for every single layer. This operation will assign the new color to all objects on the selected layer.

The dialog provides additional features:

Icon	Feature	Background
	<i>New Layer</i>	Adds new layer to the drawing. Also opens drop down menu to set layer type.
	<i>Delete Layer</i>	Delete selected layer(s). <b>Important:</b> this feature deletes selected layers and moves objects on these layers to Layer 0. The <i>Layer</i> dialog of pCon.planner (on the <i>Toolbar</i> ) deletes selected layers and all objects located on them.
	<i>Import Layers from File</i>	Import layers from a *.csv file as template.
	<i>Export selected Layers to File</i>	Export layers selected in the dialog to a *.csv file to use them as a template for creation of further geolib files.
	<i>Set new Color for selected Layers</i>	Open color dialog and assign new color to (multi)selected layers.
	<i>Show/hide Layer</i>	Show or hide blocks on the selected layer in the planning. Action applies to all layers selected in the <i>CAD Layer Manager</i> .
	<i>Lock/Unlock Layer</i>	Lock blocks against editing. Works like <i>Lock</i> feature of pCon.planner, but locks every block on the (multi)selected layers in the planning.
	<i>Refresh Layers</i>	Layers in your drawing are readout again and the list is refreshed to display all layers currently used in the drawing. Used for example following the creation of new layers/deleting layers while the <i>CAD Layer Manager</i> is opened.

In order to create correct objects, please do always color blocks directly from layer (as oposed to assigning a color to the block itself).



### **Legal remarks**

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